

I. AMENDMENTS TO THE CLAIMS:

Please cancel claim 4 without prejudice. Kindly amend claims 1 and 2, and add new claims 5-14 as follows.

The following Listing of Claims will replace all prior listings, and versions, of claims in the present application.

Listing of Claims:

1. (Currently Amended) A method of manufacturing a heat-resistant ceramic core with a three-dimensional shape used to cast a hollow flow passage ~~inside~~ by precision casting, comprising the steps of:

~~a powder lamination shaping step for forming an oxide ceramic core with the three-dimensional shape from resin-covered ceramic powder;~~

~~an impregnation step for impregnating oxide ceramics reinforcing liquid into the formed ceramic core, wherein the oxide ceramics reinforcing liquid is impregnated in a pressure reduced vessel; and~~

~~a sintering step for sintering the impregnated ceramic core in an atmosphere at 1100 degrees centigrade or more to strengthen the heat resistance thereof,~~

~~wherein the impregnated ceramic core is placed in heat-resistant powder to prevent, which prevents the impregnated ceramic core from deforming, and the said core is heated together with the heat-resistant powder.~~

2. (Currently Amended) The method of manufacturing the heat-resistant ceramic core with a three-dimensional shape specified in claim 1, wherein ~~the~~ said oxide ceramics

reinforcing liquid comprises colloidal silica, silica precursor, alumina sol, yttrium oxide sol, niobium oxide sol, or zirconia sol.

3. (Cancelled)

4. (Cancelled)

5. (NEW) The method of manufacturing the heat-resistant ceramic core with a three-dimensional shape specified in claim 1, wherein the ceramics reinforcing liquid is an inorganic binder, and during impregnation of the ceramic core the inorganic binder smoothly replaces air in the ceramic core.

6. (NEW) The method of manufacturing the heat-resistant ceramic core with a three-dimensional shape specified in claim 5, wherein impregnation of the ceramic core with inorganic binder occurs over about 5 to 10 minutes.

7. (NEW) The method of manufacturing the heat-resistant ceramic core with a three-dimensional shape specified in claim 1, wherein the resin-covered ceramic powder comprises zircon powder covered with a phenol resin or silica powder covered with the phenol resin.

8. (NEW) The method of manufacturing the heat-resistant ceramic core with a three-dimensional shape specified in claim 1, further comprising the step of:
confining the ceramic core in wax and then forming a heat-resistant shell around the ceramic core confined in wax.

9. (NEW) A method of manufacturing a heat-resistant ceramic core with a three-dimensional shape used to cast a hollow flow passage by precision casting, comprising:

 a powder lamination shaping step for forming an oxide ceramic core with the three-dimensional shape from resin-covered ceramic powder;

 an impregnation step for impregnating oxide ceramics reinforcing liquid into the formed ceramic core, wherein the oxide ceramics reinforcing liquid is impregnated in a pressure reduced vessel; and

 a sintering step for sintering the impregnated ceramic core in an atmosphere at 1100 degrees centigrade or more to strengthen the heat resistance thereof,

 wherein the impregnated ceramic core is placed in heat-resistant powder to prevent the impregnated ceramic core from deforming, and the core is heated together with the heat-resistant powder.

10. (NEW) The method of manufacturing the heat-resistant ceramic core with a three-dimensional shape specified in claim 9, wherein said oxide ceramics reinforcing liquid comprises colloidal silica, silica precursor, alumina sol, yttrium oxide sol, niobium oxide sol, or zirconia sol.

11. (NEW) The method of manufacturing the heat-resistant ceramic core with a three-dimensional shape specified in claim 9, wherein the ceramics reinforcing liquid is an inorganic binder, and during impregnation of the ceramic core the inorganic binder smoothly replaces air in the ceramic core.

12. (NEW) The method of manufacturing the heat-resistant ceramic core with a three-dimensional shape specified in claim 11, wherein impregnation of the ceramic core with inorganic binder occurs over about 5 to 10 minutes.

13. (NEW) The method of manufacturing the heat-resistant ceramic core with a three-dimensional shape specified in claim 9, wherein the resin-covered ceramic powder comprises zircon powder covered with a phenol resin or silica powder covered with the phenol resin.

14. (NEW) The method of manufacturing the heat-resistant ceramic core with a three-dimensional shape specified in claim 9, further comprising:

a wax injection molding step for confining the ceramic core in wax and then forming a heat-resistant shell around the ceramic core confined in wax.